## ALTHOUSE AND MEADE, INC.

## BIOLOGICAL AND ENVIRONMENTAL SERVICES

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County of San Luis Obispo Department of Planning and Building County Government Center San Luis Obispo, CA 93408 Attention: Trevor Keith

Re: Estrella River Vineyard Tract 2905 Western Spadefoot Toad Mitigation

## Dear Mr. Keith:

To minimize potential impacts to Western spadefoot toads (*Spea hammondii*) on the Estrella River Vineyard Tract 2905 project, we propose a mitigation strategy that seeks to protect upland and aquatic habitat near the construction zone and creates additional breeding habitat in the vicinity.

The existing reservoir where spadefoot toad tadpoles were detected in 2006 is not presently in use and may not hold sufficient rainwater to consistently support spadefoot toad breeding attempts. Very little suitable upland habitat is present around the reservoir due to existing vineyards. We expect the population of spadefoot toads on the property is composed of a low number of adult toads surviving within the vineyards and in marginal areas of unplowed ground.

We propose to construct a shallow seasonal pool within the oak tree mitigation area that will be close enough to the reservoir to attract breeding adult toads, and will have a permanent open space around it for aestivation. Sufficient space is available to construct the seasonal pool in the bottom of the depression and install required mitigation oak trees on the slopes. Existing habitat and soil conditions within the oak tree mitigation area are appropriate for spadefoot toads, and mitigation oak trees planted on the slopes would be an enhancement to spadefoot toad upland habitat.

Our recommendations are provided in the form of mitigations which supersede the spadefoot toad mitigations provided in the Biological Report for Estrella Vineyards Tract 2905 (Althouse and Meade, Inc. 2007).

**BR-1.** If primary grading occurs within 1000 feet of the northern reservoir between January and May, a pre-construction survey for Western spadefoot toads shall be

- completed. The survey shall determine if any potential breeding habitat is located within the project areas. Potential breeding habitat that is present in the project areas shall be protected by construction fencing while water is present.
- **BR-2.** Work shall not be conducted between January and May that would affect standing water in any reservoirs, drainages, seasonal pools, or puddles deemed sufficient to support breeding spadefoot toads.
- **BR-3.** No construction activities shall be performed after sunset within 1000 feet of the northern reservoir (spadefoot toad above-ground movements are usually at night).
- **BR-4.** Construction activities shall be limited to days without significant rainfall.
- **BR-5.** A biological monitor shall be present during all primary grading within 1000 feet of the northern reservoir. The monitor shall be approved by CDFG to move Western spadefoot toads, if found, out of the project area.
- BR-6. To improve breeding habitat for Western spadefoot toads on the property, seasonal pool habitat shall be created in the depression on the downstream side of the northern reservoir dam within the proposed oak tree mitigation area. The pool shall be approximately 20 feet long and 20 feet wide, with a maximum depth of two feet. The pool shall be designed to hold ponded rainwater seasonally between January and May for at least four weeks, and must dry up during the summer. A qualified biologist shall oversee creation of the seasonal pool, and shall monitor excavation work in case adult spadefoot toads are encountered. Excavation of the pool shall be by equipment designated by the contractor and approved by the biologist. Because the seasonal pool is within the proposed oak tree mitigation area, the disturbance area shall be minimized to protect native vegetation. A seasonal pool conceptual plan sheet shall be included with the project grading plan set.
- BR-7. The seasonal pool shall be monitored by a qualified biologist for use by Western spadefoot toads at least twice annually for three years. Monitoring shall be conducted at least once during spadefoot toad breeding season (between January and May) to confirm presence or absence, and once during the summer to confirm that the pool has dried. The annual breeding season monitoring survey shall be conducted in a manner that would definitively detect spadefoot toads or larvae in the pool or confirm absence (ie: seasonally timed survey using visual and dip-net survey techniques). More than one survey may be required. The project shall be deemed successful if spadefoot toads are detected breeding in the created seasonal pool. Monitoring reports shall be provided to the County of San Luis Obispo and CDFG within 45 days of survey completion.
- **BR-8.** If the seasonal pool is found not to hold water for at least four weeks during years of average rainfall, the applicant shall submit a remediation plan to the County for review and approval. The remediation plan shall indicate the steps deemed necessary to modify the pool design to retain sufficient water.

Sincerely,

Jason Dart

Copy: Jamie Kirk, Kirk Consulting